

SFA Modernization Partner

**United States Department of Education
Student Financial Assistance**



Data Warehousing Implementation Strategy Enterprise Conceptual Logical Data Model, Version 1

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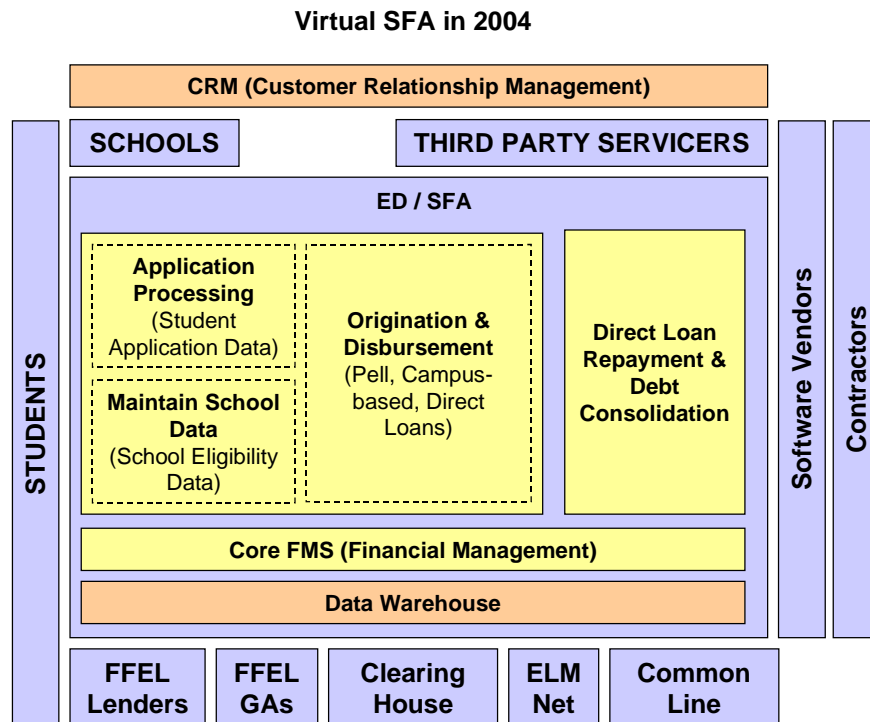
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Introduction

The data warehouse is a strategic initiative for SFA according to the SFA Modernization Blueprint. A data warehouse can benefit SFA by centralizing data and by making access, reporting, and analysis quick and easy. Fundamentally, a data warehouse provides:

- Consolidated Operational Data – today SFA spends millions on report generation and distribution from a variety of systems, and has reconciliation issues with many of the key metrics
- Consolidated Decision Support Information – would enable all levels of SFA to gain insight into the data through the ability to perform trend analysis, roll-ups and drill-downs, and data mining to find undiscovered patterns in customer behaviors

As depicted below, the data warehouse is envisioned to play a key role in the delivery of information.



This deliverable provides a conceptual view of three data marts identified in the requirements gathering process. The reasons for the proposed data marts are as different as the actual logical models.

The Students Channel needs a data mart to replace the delinquency reporting functionality on the Central Data System (CDS). CDS will shut down in fall 2000 and a replacement must be ready before that time.

SFA/CFO's current reporting environment is not meeting their needs. They have requested a data mart to automate many of their manual reporting processes, while adding functionality, improving response time and accuracy of reporting.

The Financial Partners Channel has six separate groups with data needs from one or more of the four systems that currently store information on Lenders and Guaranty Agencies. This Channel wants to build a data mart to consolidate data from these systems to meet their reporting and analysis needs.

Scope

This document is the result of numerous meetings with users in the three business units. We also reviewed existing documentation and systems designs to aid us in creating the logical models presented in this deliverable.

While the models have been reviewed by each of the user groups, it is important to note that the models themselves are at a conceptual level – meant to be input for detailed design. These models are subject to revision during the detail design phase of the data mart development projects.

Delinquent Loan Data Mart

Business Requirements

Two business requirements drive the creation of the SFA Delinquent Loan Data Mart. See the High-level User Information Requirements Matrix deliverable (#21.1.1) for more detailed descriptions.

1. ***CDS Retirement: Re-platform the Delinquent Loan Reporting Process***

SFA is retiring the Central Data System (CDS) to reduce information redundancies and save costs. The CDS functions are being transferred to other information systems. The CDS function that delivers monthly delinquent loan reports to Title IV schools is being moved to the SFA enterprise data warehouse platform. A Delinquent Loan Data Mart will serve the SFA community with the following reports and data files.

- The Department of Education Delinquency Report
- The Individual School Delinquency Report
- The Individual School Delinquency Data File

In its initial release, the data mart will leverage the existing Title IV wide area network (TIVWAN) architecture for report/file distribution.

2. ***Align Delinquent Loan Reporting with SFA's Strategic Technology Vision***

The Delinquent Loan Data Mart will utilize a modern architecture that is in-line with SFA's strategic technology vision. While the initial data mart release will simply replace the existing CDS delinquent loan reporting process, SFA may choose to leverage the advanced capabilities of the enterprise data warehouse architecture in future releases. Instead of simple, rigidly formatted reports, the data mart will enable SFA to deliver highly analytical reports to its customers. SFA will also have the option of delivering delinquent loan reports and analysis through a web interface.

Data Sources

Three data sources are used to generate the existing delinquent loan reports. These sources are integrated into the data mart logical model shown in Figure 2.

While today's source systems are Loan Servicing and TIVWAN, it should be understood that these sources may change or be replaced in the near future. Regardless, the data stored in the data mart will still need to be tracked and reported on. Also whatever new system may replace Loan Servicing or TIVWAN, they will still track by the same entities and attributes as the current systems (i.e. loan number, student, school). Replacing Loan Servicing, for example, will only require a modification in the Extraction,

Transformation and Load (ETL) process. The switching of source systems is seamless to the data mart and the reporting and analysis tools utilizing the data mart.

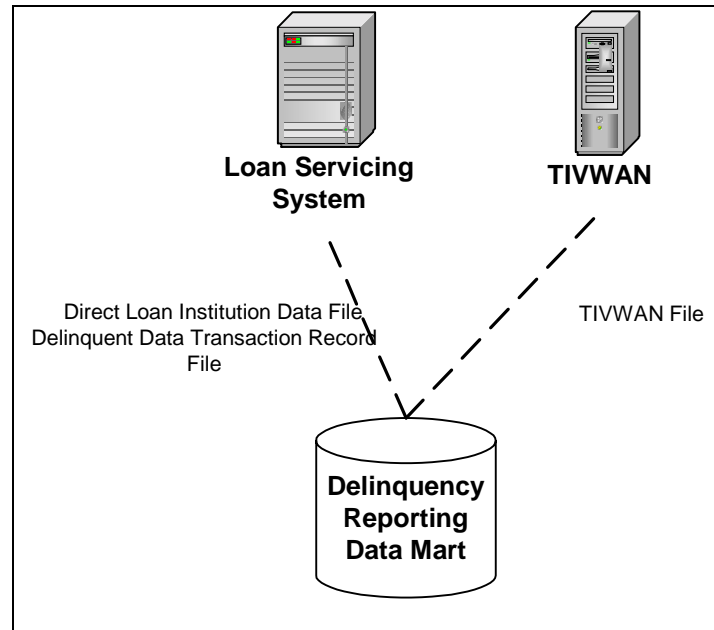


Figure 1 - Delinquent Loan Data Mart Source Systems

Each data source is described below.

Data Source	Description
TIVWAN File	<p>The TIVWAN file contains information necessary to facilitate the transmission of each individual school reports over the TIVWAN. Each school sends data to TIVWAN specifying the report format they wish to receive. Each month, the TIVWAN architecture assembles these requests into a file containing the following fields:</p> <ul style="list-style-type: none"> • Institution ID • Institution Name • TIVWAN Address • Delinquency Report Format (report only, file only, or both)
Direct Loan Institution Data File (Loan Servicing)	<p>The Direct Loan Institution Data File is used to format the Department of Education's delinquency report. The report lists all delinquent loans broken down by the schools listed in this file. This file contains the following fields:</p> <ul style="list-style-type: none"> • School ID • School Name • School Short Name
Delinquent Data Transaction Record File (Loan Servicing)	<p>The Delinquent Data Transaction Record File (DDR) lists all of the delinquent Direct Loans. The Loan Servicing system produces this file on a monthly basis. This file contains 34 fields and is the core of the Department and schools delinquency reports. Appendix A contains the DDR file layout.</p>

Logical Data Model

Based on interviews with the team replacing CDS, contractors supporting the current system, and reviewing the Cobol programs that produce the current reports, the Data Warehouse team developed a detailed knowledge of what data is needed and how that data is grouped by its users. This knowledge was transferred to the logical data model in figure 2. The logical model illustrates the dimensions that will be used to analyze the delinquent loan data.

Once this model was created, the data mart team met with CDS management to review the model and ensure its validity. This user buy in is crucial, as the logical model will be used to build the physical model, consisting of data tables, column names, and views in Oracle. The logical model is also a design for the enterprise wide data warehouse. When work begins on an enterprise wide logical model, the various data mart models will be pulled together to form the foundation of the enterprise model.

This data model will facilitate the reproduction of all current delinquency reporting done by CDS. It will also allow more detailed ad hoc analysis of delinquency data. Such questions, as “number of delinquent loans by country and academic completion year “or” charge amount by school and loan type” will easily be answered. Users will also be able to drill on the data, asking “number of loans by state or city” on the result from the original query. By storing data from each monthly cycle instead of deleting it, as is the current process, users will also be able to perform trend analysis on the delinquency data.

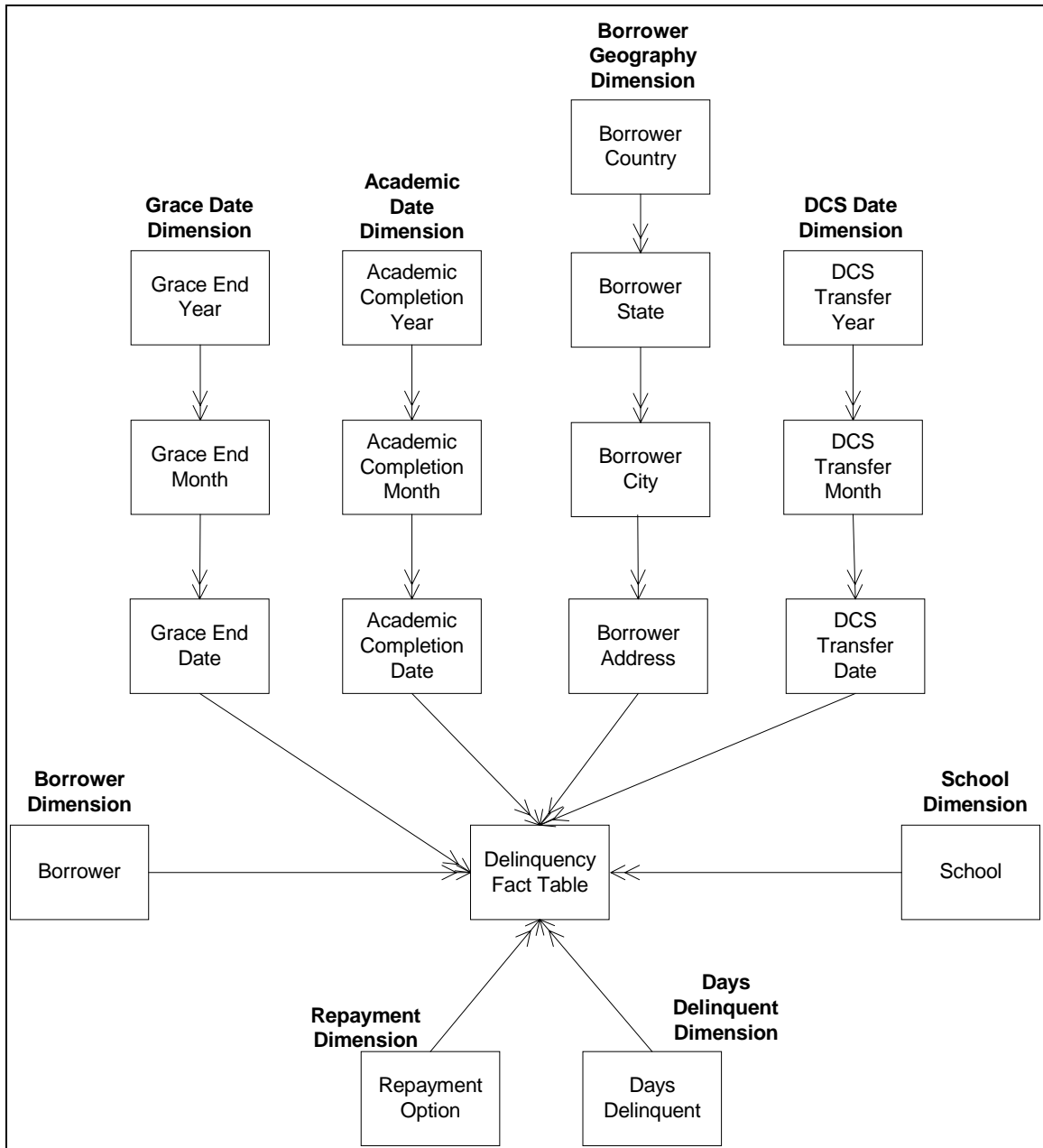


Figure 2 – Delinquent Loan Data Mart Logical Data Model

Dimensions

As shown in Figure 2, eight dimensions were derived from the available data sources. The dimensions are described below.

#	Dimension	Description	Hierarchy	Attributes
1	Borrower	The person originating the loan	None	<ul style="list-style-type: none"> Name SSN Birthday/Age
2	Borrower Geography	The location of the person originating the loan	<ul style="list-style-type: none"> Country State City Address 	<ul style="list-style-type: none"> Country State City Address Phone Number
3	School	The school the student attended when the loan was originated	None	<ul style="list-style-type: none"> School Name School Short Name School ID Institution ID Institution Name TIVWAN Address Delinquency Report Format
4	Days Delinquent	The number of days the loan payment is past due	None	<ul style="list-style-type: none"> Number of Days
5	Repayment Option	The method of loan repayment selected by the borrower	None	<ul style="list-style-type: none"> Repayment Option (ICR, Graduated, or Standard)
6	DCS Transfer Date	The date the loan was transferred to a collection agency	<ul style="list-style-type: none"> Year Month Date 	<ul style="list-style-type: none"> Year Month Date
7	Academic Completion Date	The date the borrower is scheduled to complete their educational program	<ul style="list-style-type: none"> Year Month Date 	<ul style="list-style-type: none"> Year Month Date
8	Grace Date End	The date the loan repayment grace period ended	<ul style="list-style-type: none"> Year Month Date 	<ul style="list-style-type: none"> Year Month Date

Fact Table

As shown in Figure 2, the Delinquent Loan Fact Table consists of five facts and eight foreign key fields. The foreign keys link the fact table records to the appropriate dimensions. The table below lists the fact table fields.

Delinquent Loan Fact Table	
Facts	Loan ID
	Fees Amount
	Loan Amount
	Charges Amount
	Past Due Amount
Foreign Keys	Borrower
	Academic Completion Date
	Borrower Geography
	Days Delinquent
	DCS Transfer Date
	Grace End Date
	Repayment Option
	School

Chief Financial Officer Data Mart

Business Requirements

The primary business requirement driving the CFO Data Mart is the need to automate the CFO office's current budget planning, financial reporting, and activity based costing processes. These processes rely on data extracts from the Department of Education's financial management system (FMSS), and are very laborious and time consuming. The CFO Data Mart will reduce this effort by automating the creation of the following monthly reports:

- SFA Plan vs. Actual Report
- SFA Current Plans and Fund Status Report
- SFA Operating Plan Report
- SFA Fund Balance Report

In addition, the CFO Data Mart will foster additional productivity gains by providing a web interface to the data mart. This interface will allow the CFO staff to query and analyze SFA accounting data in a flexible and efficient manner. The types of queries enabled include:

- Ad hoc queries to support budget planning requests
- Ad hoc queries to support reconciliation (FMSS to FFEL)
- Ad hoc queries to support financial reporting requests
- Ad hoc queries to support activity based costing queries and extracts

Data Sources

FMSS is the data source for the CFO Data Mart. Within FMSS, the Budget Plan Table and the Posted Transaction Table are the primary data sources. The Budget Plan Table maintains SFA's planned expenditures by fiscal year, quarter, month, and budget organization. The Posted Transaction Table maintains the financial transactions (debits and credits to general ledger accounts) resulting from posted accounting documents. Appendix B lists the Posted Transaction and Budget Plan table elements along with a preliminary assessment of their relevance to the CFO Data Mart.

Several FMSS reference tables are also sources for the CFO Data Mart. They are necessary to decode the Department of Education accounting codes and convert them to their SFA equivalents. These include the Organization, GL Account, Object Code, Document Type, and Standard Accounting Event (SAE) tables.

FMSS is the logical choice for the CFO Data Mart data source even though several related system changes are on the horizon. In the long term, FMSS will be replaced by a new financial management system. In the short term (November 2001), SFA will roll out

the first release of its internal financial management system (SFA FMS). However, FMSS is expected to remain SFA's accounting system of record until January 2002. Therefore, FMSS will remain the data source of choice for the CFO Data Mart for the next 18 months. When it is fully implemented, SFA FMS will deliver the same kinds of reports and analysis that this version of the CFO Data Mart is designed to support. Therefore, in the future, SFA plans to expand the CFO Data Mart scope to address its broader cross system reporting and analysis needs.

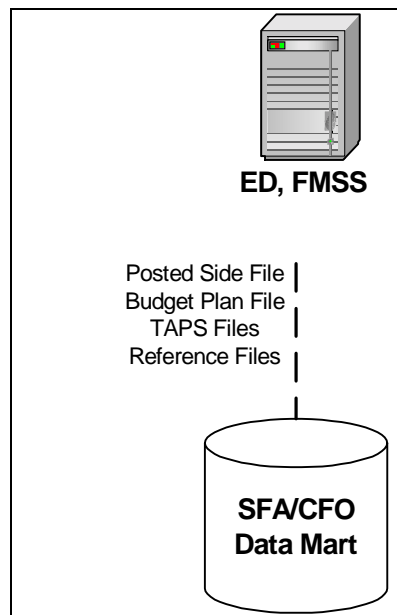


Figure 3 - SFA/CFO Source System

Data Source	Description
FMSS	<p>FMSS contains three subject areas of data for the SFA/CFO data mart.</p> <ul style="list-style-type: none"> • Posted Side – Contains all general ledger detail data • Budget Plan – Contains estimated budget plan data • TAPS – Contains Transactions Awaiting Posting • Reference Tables – Contains descriptions for attributes in various dimensions

Logical Data Model

A review of user requirements for the SFA/CFO data mart was performed as part of Deliverable 21.1.3 of Task Order 21. In preparing this deliverable, SFA/CFO users were interviewed, current reports and ad hoc analysis reviewed as well as FMSS source data. This information was used to develop the logical model in figure 4. This model was

then reviewed with CFO/SFA subject matter experts (SMEs) to validate the dimensions and review individual attributes.

The final version of the logical model will be used to create the physical model and the actual data mart. It was designed to meet the following requirements:

1. Allow creation of budget reports that do not require massaging by budget personnel before passage to senior management.
2. Provide a framework to allow ad hoc queries in a timely manner.
3. Provide a source for data extract by the Activity Based Costing team.

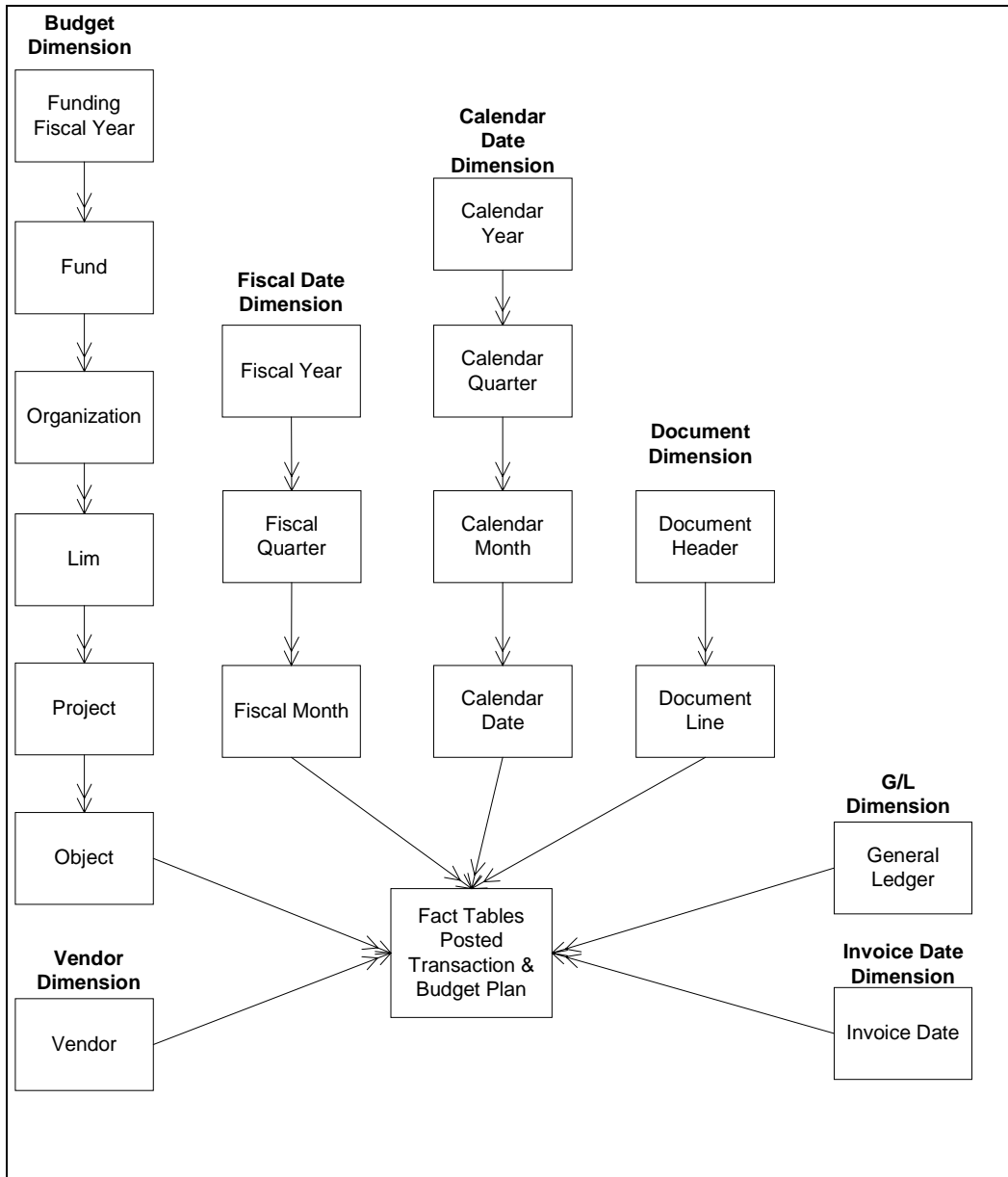


Figure 4 – CFO Data Mart Logical Data Model

Dimensions

As shown in Figure 4, seven dimensions were derived from the available data sources. Each dimension is described below.

#	Dimension	Description	Hierarchy	Attributes
1	Document	The attributes of the accounting document that triggered the FMSS transaction entry	<ul style="list-style-type: none"> Document Header Document Line 	<ul style="list-style-type: none"> Document Header <ul style="list-style-type: none"> Document Type Document # User ID SAE Document Line <ul style="list-style-type: none"> Reference Doc. GL Batch Description Sector Type Treasury Reference
2	Budget	Associates the FMSS accounting transaction with SFA's six-level budget hierarchy	<ul style="list-style-type: none"> Funding Fiscal Year Fund Organization LIM Project Object 	<ul style="list-style-type: none"> Funding Fiscal Year Fund Organization LIM Project Object
3	General Ledger	The General Ledger account that was credited or debited by the FMSS transaction	None; however, hierarchy levels such as GL Class or GL Category may be added during detail design to meet ad-hoc query and analysis requirements.	<ul style="list-style-type: none"> General Ledger Account Number
4	Fiscal Date	The fiscal date when the accounting transaction posted to FMSS	<ul style="list-style-type: none"> Fiscal Year Fiscal Quarter Fiscal Month 	<ul style="list-style-type: none"> Fiscal Year Fiscal Quarter Fiscal Month
5	Calendar Date	The calendar date when the accounting transaction posted to FMSS	<ul style="list-style-type: none"> Calendar Year Calendar Quarter Calendar Month Calendar Date 	<ul style="list-style-type: none"> Calendar Year Calendar Quarter Calendar Month Calendar Date
6	Invoice Date	The date an invoice was recognized on the accounts payable document that triggered the FMSS transaction	None; however, a date hierarchy may be added during detail design to support ad-hoc analysis & query requirements	<ul style="list-style-type: none"> Date (MM/DD/YY)
7	Vendor	Describes the vendor on an expenditure document that posted to FMSS	None	<ul style="list-style-type: none"> Vendor Name Vendor ID

Fact Tables

As shown in Figure 4, the CFO Data Mart consists of two fact tables: Posted Transaction Fact Table and Budget Plan Fact Table. The Posted Transaction Fact Table lists the amount associated with each accounting transaction by the Document, Budget, General Ledger, Fiscal Date, Calendar Date, Invoice Date, and Vendor Dimensions. The Budget Plan Fact Table lists the monthly amount, adjusted amount, and rolled flag by budget category and fiscal date. In both cases, the foreign keys link the fact records to the appropriate dimensions.

Posted Transaction Fact Table	
Facts	Amount
Foreign Keys	Document
	Budget (Object)
	General Ledger
	Fiscal Date
	Calendar Date
	Invoice Date
	Vendor

Budget Plan Fact Table	
Facts	Monthly Amount
	Adjusted Amount
	Rolled Flag
Foreign Keys	Fiscal Date
	Budget (Object)

Financial Partner Channel Data Mart

Business Requirements

Two business requirements drive the creation of the Financial Partner Channel (FPC) Data Mart. See the High-level User Information Requirements Matrix deliverable (#21.1.1) for more detailed descriptions.

1. ***Provide a Platform for Guaranty Agency & Lender Risk Modeling***

The FPC Data Mart will provide a platform for implementing the guaranty agency and lender risk models. These models will combine data from a number of sources to measure the performance of partnering institutions against a set of standard performance indicators. The risk model assessments will provide a key input to FPC's performance review planning process.

2. ***Enhance & Distribute Ad hoc Reporting & Analysis Capability***

The FPC Data Mart will enhance the Channel's ad hoc report and analysis capability, and distribute it to a broader spectrum of personnel. Due to limited system access privileges and/or insufficient training, most FPC personnel rely on the Oversight and Technical Assistance group for ad hoc analysis and reporting. The data mart's web interface will efficiently distribute self-serve ad hoc analysis and reporting to all FPC personnel at headquarters and in the regions.

Subject Oriented Logical Data Model

The FPC requirements are not sufficiently detailed to develop a logical data model complete with facts, dimensions, hierarchies, and attributes. FPC's internal data warehouse team is tasked with refining the existing requirements and developing a logical data model. Therefore, the model presented in Figure 5 takes a subject oriented perspective on the FPC Data Mart. It identifies the FPC Data Mart source systems and the types of information that will be extracted from each to support the FPC business requirements.

The data mart source systems identified in Figure 5 are subject to change. NSLDS may be re-platformed in the foreseeable future. By November 2001, guaranty agency and lender financial report processing will be transferred from FFEL to the SFA financial management system currently under development. In spite of these anticipated changes, designing the FPC Data Mart logical model is still a valid exercise. Since the logical model indicates the kind of information required to meet the user requirements, its structure is based on business needs as opposed to data sources. The data mart's extract, transform, and load processes (those that map source data elements to the data mart schema) have to be modified as data sources evolve; however, the data model will remain valid because it is driven by business needs, not data sources.

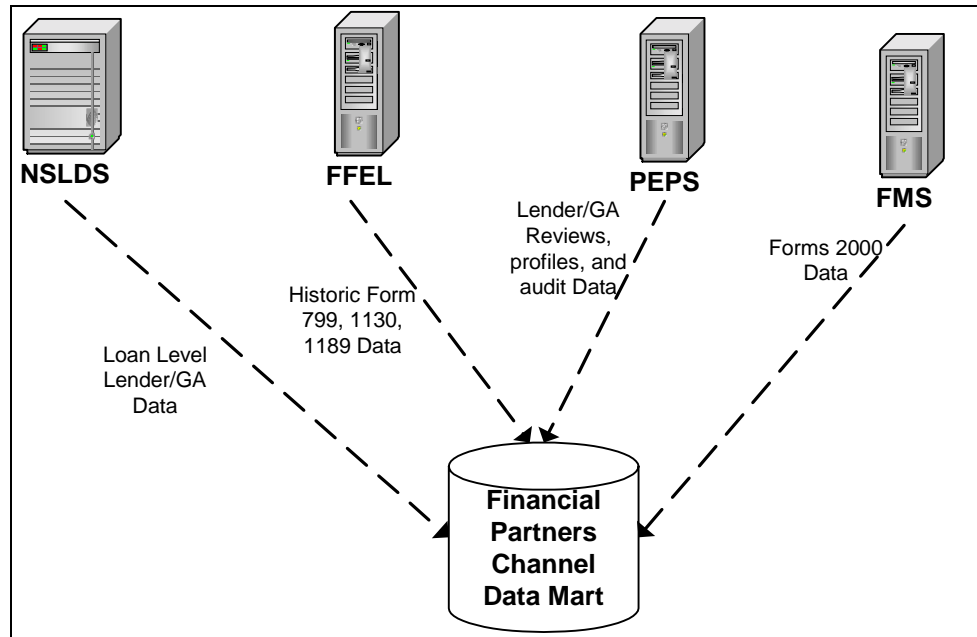


Figure 5 – FPC Data Mart Subject Oriented Logical Data Model

The following sections describe the role each data source plays in the FPC Data Mart.

NSLDS

The National Student Loan Data System (NSLDS) performs a number of operational functions for SFA. One of them is the collection and validation of loan level data from the guaranty agencies participating in the Title IV loan programs. NSLDS tracks the disposition of each loan from origination to close. The FPC Data Mart will extract this loan level data from NSLDS to support risk modeling and ad hoc reporting and analysis. The source data describes:

- The parties associated with a loan (recipient, borrower, school, lender, guaranty agency, etc.)
- The amounts associated with a loan (i.e. origination amount, amount paid, amount past due, outstanding balance, etc.)
- The dates associated with a loan (i.e. date of disbursement, date of guaranty, date of cancellation, etc.)

Appendix C lists the dimensions, facts, and dates derived from the NSLDS loan level data. The FPC data warehouse team is currently reviewing this list to identify the elements that should be included in the logical data model.

FFEL

The Federal Family Education Loan System (FFEL) processes the lender and guaranty agency monthly and quarterly reports. These reports summarize each partnering institution's loan portfolio. FPC uses the reports to determine how much to disburse or collect from its financial partners. The particular data of interest to the FPC Data Mart users may be the following reports:

- ED Form 799: Lender's Interest & Special Allowance Request & Report
- ED Form 1130: Guaranty Agency Quarterly Report
- ED Form 1189: Guaranty Agency Monthly Claims & Collections Report

ED Form 1130 and 1189 will be replaced by ED Form 2000 in October 2001. ED Form 2000 will be processed by the SFA financial management system (SFA FMS) that is currently under development. The processing of ED Form 799 (or its replacement) is also scheduled to transition to SFA FMS. Depending on the timing of the FPC Data Mart deployment, it may be necessary to extract ED Form 799 from FFEL because it has not yet transitioned to SFA FMS. Another possible scenario is that user requirements will demand the inclusion of historical financial report data in the FPC Data Mart. In that event, the data mart will need to include FFEL data even if all financial report processing has been transferred to SFA FMS by the time the FPC Data Mart is deployed.

PEPS

The Post-secondary Education Participants System (PEPS) collects and tracks data on schools, lenders, and guaranty agencies participating in the Title IV loan programs. The FPC Data Mart will extract PEPS data pertaining to lender and guaranty agency performance reviews conducted by SFA, guaranty agencies, and independent auditors. Each performance review record indicates the partnering institution that was reviewed/audited, who conducted it, when it was conducted, the reason for the review, and the resulting liability. The FPC Data Mart will also leverage PEPS data detailing the parent/child relationships between Title IV lenders. This data is necessary to support risk modeling, and ad hoc analysis and reporting.

SFA Oracle Financial Management System

In October 2000 SFA will implement Oracle's Financial Management System (SFA FMS) to serve as its internal accounting and reporting system. SFA FMS has a custom interface to process ED Form 2000. This form replaces the current guaranty agency reports (ED Form 1130, 1189). In October 2001, SFA plans to expand the SFA FMS interface to process an ED Form 799 replacement. As these forms become operational, the FPC Data Mart will extract them from SFA FMS and combine them with data from other SFA systems to support risk modeling, and ad hoc reporting and analysis. As this transition occurs, the data mart's corresponding FFEL extracts will become obsolete.

Appendix A

Delinquent Loan Data Mart Source Descriptions

Delinquent Data Transaction Record File (DDR)

<i>Element Name</i>	<i>Type</i>	<i>Size</i>	<i>Dec</i>	<i>Start</i>	<i>End</i>
Batch Identifier	A/N	1	0	1	1
Transaction Type	A/N	2	0	2	3
Transaction Sequence No.	N	4	0	4	7
Reserved	A/N	1	0	8	8
Loan ID	A/N	21	0	9	29
Social Security Number	N	9	0	30	38
Birth Date	A/N	8	0	39	46
Last Name	A/N	30	0	47	76
First Name	A/N	30	0	77	106
Middle Initial	A/N	1	0	107	107
Direct Loan Institution ID	A/N	6	0	108	113
Reserved	A/N	6	0	114	119
Past Due Amount	N	11	2	120	130
Days Delinquent	N	4	0	131	134
Delinquent Date	A/N	8	0	135	142
Loan Amount	N	11	2	143	153
Monthly Payment Amt.	N	11	2	154	164
Acad. Completion Date	A/N	8	0	165	172
Address Line 1	A/N	30	0	173	202
Address Line 2	A/N	30	0	203	232
City	A/N	25	0	233	257
State	A/N	2	0	258	259
Zip Code	A/N	14	0	260	273
Country	A/N	25	0	274	298
Address Condition	A/N	1	0	299	299
Phone Number	A/N	10	0	300	309
Phone Number	A/N	10	0	310	319
Grace End Date	A/N	8	0	320	327
Reserved	A/N	4	0	328	331
Repayment Option	A/N	2	0	332	333
DCS Transfer Date	A/N	8	0	334	341
Fees Amount	N	11	2	342	352
Charges Amount	N	11	2	353	363
Credit Reform Code	A/N	6	0	364	369

Appendix B

Chief Financial Officer Data Mart Source Descriptions

Posted Transaction Table

Field	Description	Column		
		Used	Not Used	Under Review
ACCOUNTING_PERIOD		X		
ALC	Agency Location Code		X	
AMOUNT	Posted amount	X		
APPROPRIATION	Dept of Ed agency code and actual fund code			X
APP_CATGY	Appropriation category		X	
BUDGETARY_FLAG	N if GL posting does not hit a budgetary account, else blank		X	
CONFIRMATION_DATE	Confirmation date from Treasury that payment was made			X
CUSTOMER_ID			X	
DESCRIPTION	Line level description	X		
DIST_NUM	Unknown		X	
DOCUMENT_NUMBER		X		
DOC_TYPE	Document Type	X		
EMPLOYEE_NUMBER			X	
EMPL_TYPE			X	
ENTITY_FLAG	Unknown		X	
EXTERNAL_ID	Used by systems that handle small purchases		X	
EXT_DELIVERY_ORDER	Used by systems that handle small purchases		X	
EXT_LINE_NUM	Used by systems that handle small purchases		X	
EXT_LINE_SUFFIX	Used by systems that handle small purchases		X	
EXT_MOD_NUMBER	Used by systems that handle small purchases		X	
FISCAL_YEAR	Funding Fiscal Year of Funds	X		
FUNCTION	SFA use, Cohort for loan programs, only direct loan			X
FUND	Fund	X		
FUNDING_SOURCE	Unknown		X	
FUNDS_CONTROL_OBJE	Unknown		X	
FY_INDICATOR			X	
GL_ACCOUNT	4 digit GL code plus 3 digit code for source system	X		
GL_BATCH	ID on documents representing batch they were entered in.	X		
GL_CLASSIFICATION	Used by FMSS system		X	
GL_DOC_SEQ	Used by FMSS system		X	

Field	Description	Column		
		Used	Not Used	Under Review
GL_SIDE_SEQ_NUMBER	Used by FMSS system		X	
INVOICE_DATE	Date invoice approved	X		
INVOICE_REF	Unknown		X	
IRS_1099_TYPE	Unknown		X	
LINE_NUMBER	Line of individual document	X		
MAINT_TIME	Date transaction posted		X	
OBJECT	Budget String	X		
OBLIGATION_REF	Same as Document #		X	
OFFICE	Not used		X	
OFFICE_TYPE	Not used		X	
ORGANIZATION	Budget String	X		
OVERTIME_FLAG	Not used		X	
POST_DATE	Date entry entered from feeder system. Will be different than Maint_Time if an error exists. On manual entries both fields are the same.		X	
PROJECT	Budget String	X		
Q_IDENT	Not used		X	
REFERENCE_DOC_TYPE	Document type referenced by this document	X		
REFERENCE_NUMBER	Unknown		X	
REF_DOC_LINE_NUM	Document Line number referenced by this document	X		
REF_DOC_NUM	Document referenced by this document	X		
REPORTING_GROUP	Not used		X	
REQUISITION_REF	Unknown		X	
SAE	Standard Accounting Event	X		
SECONDARY_REF	Not used		X	
SECTOR_TYPE	Commercial or Government Vendor	X		
SUMMARY_FUND	Not used		X	
TRANSACTION_DATE	Date transaction posted, date field to use for posted date	X		
TREASURY_REFERENCE	Manual batch number	X		
UNITS0	Not used		X	
USERID	USERID of person who posted document	X		
VENDOR_BRANCH	Not used		X	
VENDOR_INVOICE_NUM	Invoice number associated with vendor			X
VENDOR_PARENT	Vendor Number			X

Budget Plan Table

Field	Description	Column		
		Used	Not Used	Under Review
CREATE_DATE	Date record was created		X	
FISCAL_YEAR	Funding Fiscal Year?	X		
FK_BUC_CYCLE_ID	1A to 4A for four quarters, B or any other letter for multiple entries in the given quarter		X	
FK_BUC_FY	Unknown		X	
FUNCTION	Unknown		X	
FUND	Fund	X		
FY_INDICATOR	Unknown		X	
ID	Unknown		X	
MAINT_TIME			X	
NOTE_ID	Unknown		X	
OBJECT	Budget String	X		
ORGANIZATION	Budget String	X		
PROJECT	Budget String	X		
REFERENCE	Unknown		X	
TYPE	Unknown		X	
USERID	Individual entering record		X	
JAN_ADJ_AMOUNT thru DEC_ADJ_AMOUNT	Adjusted amount to planned budget	X		
JAN_ROLLED_FLAG thru DEC_ROLLED_FLAG	Has amount been posted to general ledgers	X		
JAN_TOTAL_AMOUNT thru DEC_TOTAL_AMOUNT	Planned budget amount by month	X		

Appendix C

Financial Partner Channel Data Mart Source Descriptions

NSLDS Guaranty Agency Extract File

Data Element	Column		
	Used	Not Used	Under Review
<i>Potential Dimensions</i>			
Guaranty Agency Claim Reason			
Lender Claim Reason			
Current Holder Lender Code			
Current School Code			
Enrollment Status Code			
Guaranty Agency Code			
Loan Status Code			
Original School Code			
Originating FFEL Lender Code			
Servicer Code			
Lender-of-Last-Resort Lender Indicator			
Origination Fee Payer Indicator			
Rehabilitated Loan Indicator			
Separate Loan Indicator			
Subsidy Indicator			
PLUS Borrower's			
Pre-Claims Assistance (PCA) / Supplemental PCA Flag			
Student's Academic Level			
Student's (SSN, Address)			
Deferment Type			
Interest Rate Type			
Aggregatable Facts			
Cancellation			
Claim Paid to Lender			
Disbursement			
Ending Balance on Claim of Other Fees			
Guaranty			
Guaranty Agency Bankruptcy Claim Refunds			
Guaranty Agency Interest Collections			
Guaranty Agency Principal Collections			
IRS Offset Interest Collections			
IRS Offset Principal Collections			
Outstanding Accrued Interest Balance			
Outstanding Principal Balance			
Refund From Lender on Claims			
Refund From School to Lender According to			

Data Element	Column		
	Used	Not Used	Under Review
Lender			
Reinsurance Claim Requested			
Supplemental Claim Requested			
Supplemental Pre-Claims Assistance Payment			
Repurchased			
Non-Aggregatable Facts			
Interest Rate			
Reinsurance Reimbursement Rate			
Loan			
Date Fields			
Date Claim Paid			
Date Deferment Starts			
Date Enrollment Status Effective			
Date Entered Repayment (Date of Maturity)			
Date Guaranty Transferred			
Date Loan Sold			
Date of Anticipated Completion			
Date of Cancellation			
Date of Disbursement			
Date of Guaranty			
Date of Loan Status			
Date of PLUS Borrower's Birth			
Date of Refund to Lender			
Date of Servicer Responsibility			
Date of Student's Birth			
Date Repurchased			
Deferment Stops Date			
Enrollment Period Begins Date			
Enrollment Period Ends Date			
Guaranty Agency Bankruptcy Claim Refunds Date			
Guaranty Agency Principal / Interest Collections Date			
IRS Offset Principal / Interest Collections Date			
Outstanding Accrued Interest Balance Date			
Outstanding Principal Balance Date			
PCA / Supplemental PCA Flag Date			
Refund From Lender on Claims Date			
Supplemental Pre-Claims Assistance Payment			

Data Element	Column		
	Used	Not Used	Under Review
Date			
Reinsurance Claim Paid Date			
Reinsurance Claim Requested Date			